

47 421 1 234 17 101 4

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 11/13/2003

TIME: 11:01:10

Input Set : N:\Cr4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

48 <211> LENGTH: 19
 49 <212> TYPE: DNA
 50 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Oligonucleotide primer
 53 <220> FEATURE:
 54 <221> NAME/KEY: misc_feature
 55 <222> LOCATION: (2)..(2)
 56 <223> OTHER INFORMATION: A or G or C or T/U
 57 <400> SEQUENCE: 4

W--> 58 tnccttgrrcc ccagtarwc

19

60 <210> SEQ ID NO: 5
 61 <211> LENGTH: 859
 62 <212> TYPE: PRT
 63 <213> ORGANISM: Mus musculus
 64 <400> SEQUENCE: 5
 65 Met Glu Gln Thr Glu Gly Val Ser Thr Glu Cys Ala Lys Ala Ile Lys
 66 1 5 10 15
 67 Pro Ile Asp Gly Lys Ser Val His Gln Ile Cys Ser Gly Gln Val Ile
 68 20 25 30
 69 Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Ile Glu Asn Ser Val Asp
 70 35 40 45
 71 Ala Gly Ala Thr Thr Ile Asp Leu Arg Leu Lys Asp Tyr Gly Val Asp
 72 50 55 60
 73 Leu Ile Glu Val Ser Asp Asn Gly Cys Gly Val Glu Glu Glu Asn Phe
 74 65 70 75 80
 75 Glu Gly Leu Ala Leu Lys His His Thr Ser Lys Ile Gln Glu Phe Ala
 76 85 90 95
 77 Asp Leu Thr Gln Val Glu Thr Phe Gly Phe Arg Gly Glu Ala Leu Ser
 78 100 105 110
 79 Ser Leu Cys Ala Leu Ser Asp Val Thr Ile Ser Thr Cys His Gly Ser
 80 115 120 125
 81 Ala Ser Val Gly Thr Arg Leu Val Phe Asp His Asn Gly Lys Ile Thr
 82 130 135 140
 83 Gln Lys Thr Pro Tyr Pro Arg Pro Lys Gly Thr Thr Val Ser Val Gln
 84 145 150 155 160
 85 His Leu Phe Tyr Thr Leu Pro Val Arg Tyr Lys Glu Phe Gln Arg Asn
 86 165 170 175
 87 Ile Lys Lys Glu Tyr Ser Lys Met Val Gln Val Leu Gln Ala Tyr Cys
 88 180 185 190
 89 Ile Ile Ser Ala Gly Val Arg Val Ser Cys Thr Asn Gln Leu Gly Gln
 90 195 200 205
 91 Gly Lys Arg His Ala Val Val Cys Thr Ser Gly Thr Ser Gly Met Lys
 92 210 215 220
 93 Glu Asn Ile Gly Ser Val Phe Gly Gln Lys Gln Leu Gln Ser Leu Ile
 94 225 230 235 240
 95 Pro Phe Val Gln Leu Pro Pro Ser Asp Ala Val Cys Glu Glu Tyr Gly
 96 245 250 255
 97 Leu Ser Thr Ser Gly Arg His Lys Thr Phe Ser Thr Phe Arg Ala Ser

RAW SEQUENCE LISTING

PATENT APPLICATION N: US/09/707,468B

DATE: 11/14/03

TIME: 11:11:17

Input File : N:\Cr4\12112002\I707468A.raw

Output Set : N:\CRF4\01032003\I707468B.raw

93	260	265	270
94	Ile His Ser Ala Arg Thr Ala Pro Gly Gly Val Gln Gln Thr Gly Ser		
95	275	280	285
96	Ile Ser Ser Ser Ile Arg Gly Pro Val Thr Gln Gln Arg Ser Leu Ser		
97	290	295	300
98	Leu Ser Met Arg Phe Tyr His Met Tyr Asn Arg His Gln Tyr Pro Phe		
99	305	310	315
100	Val Val Leu Asn Val Ser Val Asp Ser Glu Cys Val Asp Ile Asp Val		
101	320	325	330
102	Thr Pro Asp Lys Arg Gln Ile Leu Leu Gln Glu Glu Lys Leu Leu Leu		
103	340	345	350
104	Ala Val Leu Lys Thr Ser Leu Ile Gly Met Phe Asp Ser Asp Ala Asn		
105	355	360	365
106	Lys Leu Asn Val Asn Gln Gln Pro Leu Leu Asp Val Glu Gly Asn Leu		
107	370	375	380
108	Val Lys Leu His Thr Ala Glu Leu Glu Lys Pro Val Pro Gly Lys Gln		
109	385	390	395
110	Asp Asn Ser Pro Ser Leu Lys Ser Thr Ala Asp Glu Lys Arg Val Ala		
111	400	405	410
112	Ser Ile Ser Arg Leu Arg Glu Ala Phe Ser Leu His Pro Thr Lys Glu		
113	420	425	430
114	Ile Lys Ser Arg Gly Pro Glu Thr Ala Glu Leu Thr Arg Ser Ile Pro		
115	435	440	445
116	Ser Glu Lys Arg Gly Val Leu Ser Ser Tyr Pro Ser Asp Val Ile Asp		
117	450	455	460
118	Tyr Arg Gly Leu Arg Gly Ser Gln Asp Lys Leu Val Ser Pro Thr Asp		
119	465	470	475
120	Ser Pro Gly Asp Cys Met Asp Arg Glu Lys Ile Glu Lys Asp Ser Gly		
121	485	490	495
122	Leu Ser Ser Thr Ser Ala Gly Ser Glu Glu Glu Phe Ser Thr Pro Glu		
123	500	505	510
124	Val Ala Ser Ser Phe Ser Ser Asp Tyr Asn Val Ser Ser Leu Glu Asp		
125	515	520	525
126	Arg Pro Ser Gln Glu Thr Ile Asn Cys Gly Asp Leu Asp Cys Arg Pro		
127	530	535	540
128	Pro Gly Thr Gly Gln Ser Leu Lys Pro Glu Asp His Gly Tyr Gln Cys		
129	545	550	555
130	Lys Ala Leu Pro Leu Ala Arg Leu Ser Pro Thr Asn Ala Lys Arg Phe		
131	565	570	575
132	Lys Thr Glu Glu Arg Pro Ser Asn Val Asn Ile Ser Gln Arg Leu Pro		
133	580	585	590
134	Gly Pro Gln Ser Thr Ser Ala Ala Glu Val Asp Val Ala Ile Lys Met		
135	595	600	605
136	Arg Met Lys Gln Leu Gln His Leu Lys Ala Gln Asn Lys His Glu Leu		
137	610	615	620
138	Arg Met Lys Gln Leu Gln His Leu Lys Ala Gln Asn Lys His Glu Leu		
139	625	630	635
140	Ser Tyr Arg Lys Phe Arg Ala Lys Ile Cys Pro Gly Glu Asn Gln Ala		
141	640	645	650
142			

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 11/03/03

TIME: 11:01:17

Input Set : N:\Cr4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

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147 Ala Glu Asp Glu Leu Arg Lys Glu Ile Ser Lys Ser Met Phe Ala Glu
148           660           665           670
149 Met Glu Ile Leu Gly Gln Phe Asn Leu Gly Phe Ile Val Thr Lys Leu
150           675           680           685
151 Lys Glu Asp Leu Phe Leu Val Asp Gln His Ala Ala Asp Glu Lys Tyr
152           690           695           700
153 Asn Phe Glu Met Leu Gln Gln His Thr Val Leu Gln Ala Gln Arg Leu
154           705           710           715           720
155 Ile Thr Pro Gln Thr Leu Asn Leu Thr Ala Val Asn Glu Ala Val Leu
156           725           730           735
157 Ile Glu Asn Leu Glu Ile Phe Arg Lys Asn Gly Phe Asp Phe Val Ile
158           740           745           750
159 Asp Glu Asp Ala Pro Val Thr Glu Arg Ala Lys Leu Ile Ser Leu Pro
160           755           760           765
161 Thr Ser Lys Asn Trp Thr Phe Gly Pro Gln Asp Ile Asp Glu Leu Ile
162           770           775           780
163 Phe Met Leu Ser Asp Ser Pro Gly Val Met Cys Arg Pro Ser Arg Val
164           785           790           795           800
165 Arg Gln Met Phe Ala Ser Arg Ala Cys Arg Lys Ser Val Met Ile Gly
166           805           810           815
167 Thr Ala Leu Asn Ala Ser Glu Met Lys Lys Leu Ile Thr His Met Gly
168           820           825           830
169 Glu Met Asp His Pro Trp Asn Cys Pro His Gly Arg Pro Thr Met Arg
170           835           840           845
171 His Val Ala Asn Leu Asp Val Ile Ser Gln Asn
172           850           855

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174 <210> SEQ ID NO: 6

175 <211> LENGTH: 3056

176 <212> TYPE: DNA

177 <213> ORGANISM: Mus musculus

178 <400> SEQUENCE: 6

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179 gaattccggg gaagggtcctg aagaatttcc agatttcctga gtatcattgg aggagacaga      60
180 taactgttcg tcaggtaacg atgggtgata tgcacacaaa atgggtgttc ctggagacgc      120
181 gtcttttccc gagaggggca ccgcaactct ccggcggtga ctgtgactgg aggagtcctg      180
182 cactcatgga gcaaacggaa ggcgtagta cagaatgtgc taaggccatc aagcctattg      240
183 atgggaagtc agtccatcaa atttgtctcg ggcaggtaga actcagttta agcaccgtctg      300
184 tgaaggagtc gatagaaaat agtgtagatg ctggtgtctac tactattgat ctaaggctta      360
185 aagactatgg ggtggacttc attgaagttt cagacaatgg atgtggggtg gaagaagaaa      420
186 acttgaaggy tctagctctg aaacatcaca catctaagat tcaagagttt gcgcacctca      480
187 ccgaggttga aactttcggc ttctgggggg aagctctgag ctctctgtgt gcaattagt      540
188 atgtcactat ttctacttgc caagggtctg caagcggttg gactcgactg gtgittgacc      600
189 ataattggaa aatcaccag aaaactccct acccccgacc taaagggaac acagtcatg      660
190 tgcagcactt attttataca ctaccctgct gttacaaaga gtttcagagg aacattaaaa      720
191 aggagtattc caaatggtg caggtcttac aggcgtactg tatcatctca gcagggtctc      780
192 gtgtaagctg cactaatcag ctccgagagg ggaagcgcca cgtgtgtgtg tgcacaagg      840
193 gcacgtctcg catgaaggaa aatatcggtt ctgtgttttg ccagaagcag ttgcaaggcc      900
194 tcatttcctt tcttcagctg cccctactg acgtgtgtg tgaagagtag ggcctgagca      960
195 ctccaggacg ccacaaaacc tttctactgt ttccggcttc atttcacagt gcacgcacgg      1020
196 cgcgcgggag agtgcaacag acaggcagtt tttcttcata aatcagaggo cctgtgaccc      1080

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/707,468B

DATE: 01/03/2003

TIME: 11:01:10

Input Set : N:\Cr4\12112002\I707468A.raw

Output Set: N:\CRF4\01032003\I707468B.raw

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197 agcaaaaggtc tctaagcctg tcaatgaggt tttatcacat gtataaaggc catcagtaac 1140
198 catttgctgt ccttaacgtt tcaatgaggt cagaatgtgt ggatattaat gtaattccag 1200
199 ataaaaggga aattctctct caagaagaga agtatattgt ggcgttttta aagacctctt 1260
200 tgatagggaat gtttgacagt gatgcaaca agottaatgt caacaagcag ccaattgctag 1320
201 atgttgaaag taacttagta aagctgcata ctgcagaaat agaaaagcct gtcacaggaa 1380
202 agcaagataa ctctctctca ctgaagagca cagcagacga gaaaagggtt platccatt 1440
203 ccaggctgag agaggccttt tctcttcata ctactaaaag gggcgtgtta tctctttatc 1500
204 agactgctga actgacacgg agttttccaa ctgagaaaaa gggcgtgtta tctctttatc 1560
205 ctccagacgt catctcttad agaggccttc tggctctgca ggacaaaatt gtgagtcaca 1620
206 cggacagcgc tgggtgactgt atggacagag agaaaataga aaaagaactc gggctcagca 1680
207 ggaactcagc tggctctgag gaagagttca gcaccccaga agtggccagt agcttttagc 1740
208 gtgactatca cgtgagctcc ctagaagaca gaccttctca ggaacccata aactgtgtgt 1800
209 actcggactg cgtctctcca ggtacaggac agtctctgaa gccagaagac catggatctc 1860
210 aatgcasaac tctacctata gctcgtctgt ccccccaaaa tgcacaagcc ttcaagacag 1920
211 aggaagaa c ctcaaatgtc aacattttct aagatgtccc tggctctcag agcactctag 1980
212 cagctgagtc ccatgtagcc ataaaaatga ataagaqaat cgtgctcttc gaggctcttc 2040
213 tgagttctct agctaagcga atgaagcagt tacagccctt aaaggcgcag aacaaactgt 2100
214 aactgagttc cagaaaaatt agggccaaga ttggcccttg agaaaaacca gcagcagaag 2160
215 atgaactcgc aaaagagatt agtaaatcga tgtttgcaga gatggagatc ttgggtcagt 2220
216 ttaacctgag atttatagta accaaactga aagaggacct ctctctgttg gaccagctgt 2280
217 ctgcggatga gaagtacaac ttgagatgc tgcagcagca caaggctgct caggcgcaga 2340
218 ggctcactac accccagact ctgaacttaa ctgctgtcaa tgaagctgta ctgataaaaa 2400
219 atctggaaat attcagaaag catggctttg actttgtcat tgatgaggat gctccagtc 2460
220 ctgaagaggc taaattgatt tctttaccaa ctagtaaaaa ctggaccttt ggaccccag 2520
221 atatagatga actgactctt atgttaagt acagccctgg ggtcatgttc cggccctcac 2580
222 gagtcagaca gatgtttgt tccagagcct gtgggaagt agtgatgatt ggaacggcgc 2640
223 tcaatgogag cgagatgaag agtctcaca cccactggg tgagatggac cacccttgga 2700
224 actgcccaca cggcaggcca accatgagcc acgttgcaca tctggatgtc atctctcaga 2760
225 actgacacac ccttgttagc atagagtata ttacagattg ttcggtttgc aaagagaagg 2820
226 tcttaagtaa ctgattatc gttgtacaaa aattagcatg ctgctttaat gtactggatc 2880
227 catttaaaag cagtgttaag gcaggcatga tggagtgttc ctctagctca gctacttggg 2940
228 tgatccgctg ggagctcatg tgagcccagg actttgagac cactccagac cacattcatg 3000
229 agactcaatt caaggacaaa aaaaaaaga tatttttgaa gccttttaaa aaaaaa 3060

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191 (210) SEQ ID NO: 7

192 (211) LENGTH: 362

193 (212) TYPE: PFI

194 (213) ORGANISM: Homo sapiens

195 (400) SEQUENCE: 7

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196 Met Glu Arg Ala Glu Ser Ser Ser Thr Glu Pro Ala Lys Ala Ile Lys
197 1 5 10 15
198 Pro Ile Asp Arg Lys Ser Val His Gln Ile Cys Ser Gly Gln Val Val
199 20 25 30
200 Leu Ser Leu Ser Thr Ala Val Lys Glu Leu Val Glu Asn Ser Leu Asp
201 35 40 45
202 Ala Gly Ala Thr Asn Ile Asp Leu Lys Leu Lys Asp Tyr Gly Val Asp
203 50 55 60
204 Leu Ile Glu Val Ser Asp Asn Gly Lys Gly Val Glu Glu Glu Asn Phe
205 65 70 75 80
206 Glu Gly Leu Thr Leu Lys His His Thr Ser Lys Ile Gln Glu Phe Ala

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/707,468B

DATE: 01/08/2013
TIME: 11:01:11

Input Set : N:\Crf4\12112002\I707468A.raw
Output Set: N:\CRF4\01032003\I707468B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 5,11
Seq#:4; N Pos. 2

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 4

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/707,468B

DATE: 11/07/03

TIME: 11:11:11

Input Set : N:\Crf4\12112002\I707468A.raw

Output Set : N:\CRF4\01032003\I707468B.raw

1:0 M:77 C: Current Application Number differs, Wrong Format

1:41 M:341 W: (46) "L" or "Xaa" used, for SEQ ID#:3 after pos.:1

1:55 M:41 W: (46) "L" or "Xaa" used, for SEQ ID#:4 after pos.:1



Creation date: 09-04-2003
Indexing Officer: NNGUYEN7 - NAM NGUYEN
Team: OIPEBackFileIndexing
Dossier: 09707468

Legal Date: 02-24-2003

No.	Doccode	Number of pages
1	SRNT	1

Total number of pages: 1

Remarks:

Order of re-scan issued on